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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/575,137	05/23/2000	Kia Silverbrook	PP13US	9199

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SILVERBROOK RESEARCH PTY LTD
393 DARLING STREET
BALMAIN, 2041
AUSTRALIA

EXAMINER	
HERNANDEZ, NELSON D	

ART UNIT	PAPER NUMBER
2612	4

DATE MAILED: 03/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/575,137	SILVERBROOK ET AL.	
	Examiner	Art Unit	
	Nelson D. Hernandez	2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6 and 8-18* is/are rejected.

7)☒ Claim(s) *7* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *23 May 2000* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 3.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Specification

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Appropriate correction is required.

2. The disclosure is objected to because of the following informalities: on pages 1 and 2 the applicant needs to supply the US serial numbers of the related arts.

Appropriate correction is required.

Claim Objections

3. Claim 16 objected to because of the following informalities: Claim 16 recites the limitation "said effects module" in lines 6 and 7. There is insufficient antecedent basis for this limitation in the claim. Appropriate correction is required.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1- 5, 8, 12-14, 16 and 17 rejected under 35 U.S.C. 103(a) as being unpatentable over Maruichi, US Patent 5469211 in view of Ohki, US 2002/0001032 A1.

Re claim 1, Maruichi discloses a timer module (Figs. 1: 10 and 2: 10) comprising: a body; control means (Fig. 1: S1, S2 and S3) within said body that automates the capture of multiple images by a camera module (Figs. 1: 1, 2: 1), the capture of each image being separated by specific time interval (Col. 3, lines 20-25); connection means (Fig. 1: 10a and 10b) incorporated in said body for connecting said timer module to connections (Fig. 1: 6, 7 for power and 16 for communication) providing power and data between said timer module and said camera module (Col. 2, line 51 – col. 3, line 33).

Maruichi does not teach the connection means for providing power and data between said timer module and said camera module as a bus as claimed.

However, Ohki teaches a portable computer system (Fig. 1: 1) coupled to a GPS (Global Positioning System) adapter (Fig. 1: 30), a digital camera (Fig. 1: 20), a compact printer (Fig. 1: 40) and a memory (Fig. 1: 50) by using bus connectors (Fig. 1: 8, 9 and 10), wherein said bus provides power and data between the computer system and the other devices (Page 3, ¶0033 - ¶0036 and page 4, ¶0048).

Therefore, taking the combined teaching of Maruichi and Ohki as a whole, it would have been obvious to modify the connection means for connecting the timer module to the camera in Maruichi by incorporating the separate connections for power and data into a bus for providing power and data between said timer module and said camera module. Doing so would allow the connection provide data and power between

the camera and the timer module and also improve the ability of connecting said timer module to different devices using the bus connection standard.

Re claim 2, Maruichi teaches that the control means automates storage of images one memory module (a tape cassette inside the camera module) (Col. 2, line 35 – col. 3, line 33), but does not teach the memory module connected to a bus.

However, Ohki teaches a portable computer system (Fig. 1: 1) coupled to a memory (Fig. 1: 50) by using bus connector (Fig. 1: 9).

Therefore, taking the combined teaching of Maruichi in view of Ohki as a whole, it would have been obvious to connect an external memory to the system for automatically store images taken by the camera at a predetermined time interval set by the timer module. Doing so would help the system interchange the memory card with another for storing more images or detach the memory to transfer said images to another image processing system.

Re claim 3, Maruichi discloses two connection means incorporated in the body, at least one connection means connecting the timer module (Figs. 1: 10 and 2: 10) to at least said camera module (Figs. 1: 1, 2: 1) and one memory module (a tape cassette for recording the image taken by said camera module) (Col. 2, line 35 – col. 3, line 33).

Re claim 4, Maruichi discloses the timer module having two or more connection means incorporated in said body including a first connection means (metal plates in front not shown) connectable to said camera module and second connections means (Fig. 1, items 18 and 19) connectable to further modules in a stackable manner (col. 2, line 47 – col. 3, line 8 and col. 3, lines 34-46).

Re claim 5, Maruichi in view of Ohki teach two connection means incorporated in the body, at least one connection means connecting the timer module (Figs. 1: 10 and 2: 10 in Maruichi) to the camera module (Figs. 1: 1, 2: 1 in Maruichi) and one battery module (Fig. 1: 20 in Maruichi) (Col. 2, line 35 – col. 3, line 33) for a compact printer system (See fig. 1 in Ohki).

Re claim 8, Maruichi discloses the control means as an application specific integrated circuit comprising a micro-controller (Fig. 3: 15). A clock is necessitated in the controller of the timer module to cause the camera to record at predetermined time intervals (col. 2, line 47 – col. 3, line 8 and col. 3, lines 34-46).

Re claim 12, Maruichi discloses a selection of buttons to choose from a selection of units of time intervals expressed as fraction of time, wherein switch S1 is used for selecting a time interval for every 1/3 minutes, S2 for 1/10 minutes and S3 for 1/30 minutes, (Fig. 3: S1, S2 and S3) (Col. 3, lines 20-25).

Re claim 13, Maruichi discloses a units button (Figs. 1 and 3, items S1, S2 and S3) to select a number of units of the time interval (Col. 3, lines 9-33).

Re claim 14, Maruichi discloses a start/stop button to start and stop a countdown of at least one said specific time intervals (Col. 3, lines 9-33).

Re claim 16, if the body of a claim fully and intrinsically sets forth all of the limitations of the claimed invention, and the preamble merely states, for example, the purpose or intended use of the invention, rather than any distinct definition of any of the claimed invention's limitations, then the preamble is not considered a limitation and is of no significance to claim construction. The claim preamble must be read in the context

of the entire claim. Therefore a compact printer system was not considered as a limitation since is stated as an intended use in the preamble. See MPEP § 2111.02.

Maruichi discloses a timer module (Figs. 1: 10 and 2: 10) comprising: a body; control means (Fig. 1: S1, S2 and S3) within said body that automates the capture of multiple images by a camera module (Figs. 1: 1, 2: 1), the capture of each image being separated by specific time interval; connection means (Fig. 1: 10a and 10b) incorporated in said body for connecting said timer module to connections (Fig. 1: 6, 7 for power and 16 for communication) providing power and data between said timer module and said camera module (Col. 2, line 51 – col. 3, line 33).

Maruichi does not teach the connection means for providing power and data between said timer module and said camera module as a bus as claimed.

However, Ohki teaches a portable computer system (Fig. 1: 1) coupled to a GPS (Global Positioning System) adapter (Fig. 1: 30), a digital camera (Fig. 1: 20), a compact printer (Fig. 1: 40) and a memory (Fig. 1: 50) by using bus connectors (Fig. 1: 8, 9 and 10), wherein said bus provides power and data between the computer system and the other devices (Page 3, ¶0033 - ¶0036 and page 4, ¶0048).

Therefore, taking the combined teaching of Maruichi and Ohki as a whole, it would have been obvious to modify the connection means for connecting the timer module to the camera in Maruichi by incorporating the separate connections for power and data into a bus for providing power and data between said timer module and said camera module. Doing so would allow the connection provide data and power between

the camera and the timer module and also improve the ability of connecting said timer module to different devices using the bus connection standard.

Re claim 17, Maruichi in view of Ohki teach substantially the same as in claims 2 and 4. Therefore, grounds for rejecting claim 2 and 4 apply here.

6. Claim 6 rejected under 35 U.S.C. 103(a) as being unpatentable over Maruichi, US Patent 5469211 in view of Ohki, US 2002/0001032 A1 and further in view of Matsumura, US Patent 5040006.

Re claim 6, Maruichi in view of Ohki teach a timer module for selecting a time interval for capturing images at said time interval but do not teach a LCD being connected to the control means for providing information about the time intervals.

However, Matsumura teaches an interval shootable camera (Fig. 1) having a monitor LCD (Fig. 1: 10) for displaying information about the time intervals between each release signal as a countdown in order to take an image at a predetermined time interval (Col. 3, lines 20-25).

Therefore, taking the combined teaching of Maruichi in view of Ohki and further in view of Matsumura as a whole, it would have been obvious to modify the time module in Maruichi by incorporating a LCD to display the information about the time interval selected for capture images separated by a specific time interval. Doing so would give the user a feedback of the time remaining before capturing an image using the interval capture mode.

7. Claims 9 and 18 rejected under 35 U.S.C. 103(a) as being unpatentable over Maruichi, US Patent 5469211 in view of Ohki, US 2002/0001032 A1 and further in view of Suda, US 2002/0164147 A1.

Re claim 9, Maruichi in view of Ohki do not teach that the control means comprises information about an image number and a target memory module for storage the captured images.

However, Suda discloses an image recording apparatus (Fig. 1: 101) wherein a microcomputer (Fig. 1: 104) sets and control the image numbers to the images taken, wherein each number is incremented by one and recorded in memory (fig. 1: 111) to each new image taken (Page 3, ¶ 0052 - ¶ 0055).

Therefore, taking the combined teaching of Maruichi in view of Ohki and further in view of Suda as a whole, it would have been obvious to modify the timer module by using a microcomputer having information about an image number and a target memory module for storage the captured images. Doing so would enable the timer module to record the images with number so as to make easier for the user to find an image of interest.

Re claim 18, Maruichi in view of Ohki and further in view of Suda substantially teach the steps of setting a specific time interval between said capture of said images, setting an initial image number on a connected memory module and the step of starting the image capture process for a compact printer system in claims 1, 2 and 9. Therefore, grounds for rejecting claims 1, 2 and 9 apply here.

8. Claims 10 and 11 rejected under 35 U.S.C. 103(a) as being unpatentable over Maruichi, US Patent 5469211 in view of Ohki, US 2002/0001032 A1 and further in view of Riches, US Patent 4550967.

Re claims 10 and 11, Maruichi discloses connection means (Fig. 1, items 10a, 10b, 17a and 17b) providing physical connection between the timer module and the camera. Maruichi does not teach the connection means comprising a bayonet fitting type connection as claimed.

However, Riches teaches an electrical connector comprising a male bayonet fitting (Fig. 1, item 10) and a female bayonet fitting (Fig. 1, item 30) to establish physical and electrical connection between two devices (Col. 2, line 47 – col. 3, line 7).

Therefore, taking the combined teaching of Maruichi in view of Ohki and further in view of Riches, it would have been obvious to modify the connection means disclosed by Maruichi using a bayonet type connector to establish connection between the timer module and the camera. Doing so would help secure in place the timer module to the camera module.

9. Claim 15 rejected under 35 U.S.C. 103(a) as being unpatentable over Maruichi, US Patent 5469211 in view of Ohki, US 2002/0001032 A1 and further in view of Tomaszewski, US 2001/0001563 A1.

Re claim 15, Maruichi in view of Ohki does not explicitly teach the bus for connecting the timer to the camera is a serial bus.

However, Tomaszewski teaches a portable camera (Fig. 1: 104) coupled to a computer (Fig. 1: 100) by using a Universal Serial Bus (USB) (Fig. 1: 106, 107 and

108), so when the camera is connected to the computer, automatically changes the setting from portable to a computer operated mode based on a detection of a signal indicating that the camera is connected to the computer, wherein the USB provides power and data between the camera and the computer (Page 1, ¶0017, ¶0018 and ¶0021).

Therefore, taking the combined teaching of Maruichi in view of Ohki and further in view of Tomaszewski as a whole, it would have been obvious to modify the connection means for connecting the timer module to the camera by using a serial bus for providing power and data between said timer module and said camera module. Doing so would allow the connection provide data and power between the camera and the timer module in response to a connection detection of said devices, also would help with compatibility issues with different devices increasing the portability of the system.

Allowable Subject Matter

10. Claim 7 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The prior art of records, neither anticipates nor renders obvious the following limitations as claimed: a timer module connected to a camera module wherein said timer module comprises a LCD capable of displaying a plurality of icons indicative of a unit of time and a proportion of said time interval elapsed until next capture time.

Double Patenting

11. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the

unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-18 of application 09/575,137 are broader recitations of the same invention claimed in claims 1-18 of application 10/636,276 since 09/575,137 claims are written as a means plus function and 10/636,276 claims are written as a specific apparatus. Therefore, the 09/575,137 claims are encompassed by 10/636,276 claims. It is critical that any patents issuing from these two applications be commonly owned throughout their term so as to avoid a potential license from owing fees to two different parties.

Therefore a terminal disclaimer is required.

Contact

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nelson D. Hernandez whose telephone number is (703) 305-8717. The examiner can normally be reached on 8:30 A.M. to 6:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy R. Garber can be reached on (703) 305-4929. The fax phone

number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nelson D. Hernandez
Examiner
Art Unit 2612

NDHH

VU LE
PRIMARY EXAMINER